

# United States Patent

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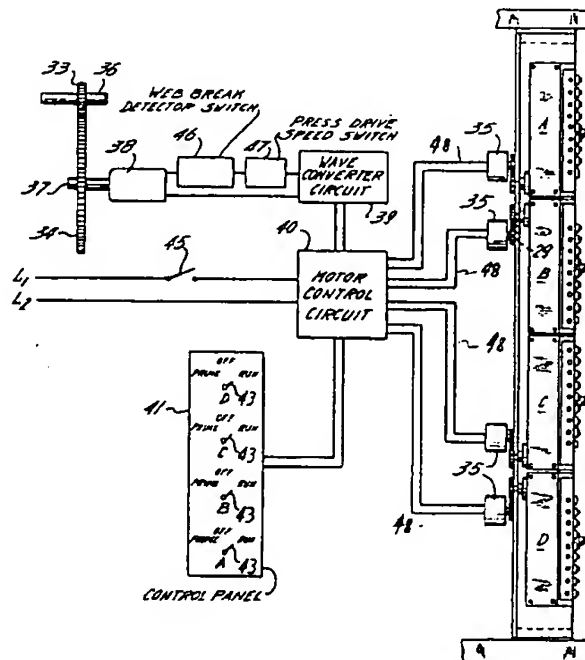
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[54] DRIVE MEANS FOR THE INKING MECHANISM OF  
A PRINTING MACHINE  
13 Claims, 5 Drawing Figs.

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**ABSTRACT:** A mechanism for driving multiunit pumps of an inking mechanism in a printing machine using a signal-sending device to transmit electrical pulse signals, in response to rotation of the press drive shaft, to a motor control circuit, which in turn operates stepping motors to drive an ink pump including remote control means for selectively operating any such unit. An entire pumping unit can be electrically turned on or off to meet various pumping requirements as called for by different operating conditions.



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TITLE: DRIVE MEANS FOR THE INKING MECHANISM OF A PRINTING MACHINE

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In a typical inking mechanism of modern design, as for example the Fusco inking mechanism, there are a number of units, one such unit for each page width of printing machine. Each unit contains a number of measuring pump elements, there being typically, one such element for each column width of the printing mechanism, and each pumping element communicates through a flexible tubing to the ink rail, for supplying ink to one of the nozzles thereof. The rate of pumping of each pumping element can be individually varied or totally silenced by limiting the stroke of the pump plunger to zero, through remote control means. The plunger of each pump element is driven by means of a train of meshing spur gears which is secured to the plunger, which in turn is driven through gear boxes and transverse shafts from a drive shaft. The drive shaft is driven by gearing directly from the main press drive.

The inking mechanism (FIG. 2) is preferably divided into number of units A,B,C,D, there being one such unit for each page width of the printing mechanism. Each unit contains a number of measuring pump elements, there being, typically, one such element for each column width of the printing mechanism, and each pumping element communicates through a flexible tubing 22 to the ink rail, for supplying ink to one of the nozzles